ELECTRONIC FILING AND IMAGING OF COURT DOCUMENTS A PROPOSED DESIGN AND COST ESTIMATE FOR 1996-1999

GENERAL ASSUMPTIONS 06/23/95

This proposal represents one POSSIBLE model for establishing electronic filings and electronic imaging of hard-copy documents as the official record comprising the King County Superior Court's case files. The ACTUAL model used will be a result of expert advice, bid processes, and general business process reengineering.

This basic change in the nature of the original court file will result in wide-ranging changes in litigation and the way information is transmitted within the legal community. Hand-in-hand with business process improvements by the Court, its administrative support, and the Clerk's Office, these changes can bring substantial savings and improvements in the quality of judicial decision-making, the speed of judicial processes, and everyone's access to justice. This project provides the infrastructure to enable use of "smart" electronic forms," community kiosks for litigant information, access to documents, offsite filing, and other forms of community based access to justice.

- o Overall project management provided by existing DJA and Court staff
- o One dedicated system manager position proposed (consultant or ongoing staff)
- o Initial pilot would likely be adult criminal cases, though other case groups may prove more appropriate once planning is begun; the pilot project is not yet chosen.
- o This is a multi-departmental proposal including Superior Court, Superior Court Administration, Judicial Administration, the Prosecutor, and defender agencies
- Computers in Court/County would be already networked. Internet connection through KC/Metro.
- o Judges' tools covered in network (e.g., CD-ROM law books, Internet access, word processing)
- Court/Clerk will attempt to reduce filed materials by strict enforcement of rules against duplicate or unnecessary filings and by procedural reforms cutting the number of documents required in court files.
- Existing LAN administration will be utilized in supporting/integrating systems
- Basic assumptions about electronic document types to be handled:

Documents submitted in electronic form (EDI) / automated docketing:	40%
Documents submitted as hard copy, to be imaged / clerk-docketed:	60%
Hard copy sent in by fax, captured electronically:	20%
Hard copy delivered to Clerk, to be scanned into electronic format:	80%

o For cost estimating, assumed percent for ongoing annual upkeep for equipment and software:

5.00%

ELECTRONIC FILING AND IMAGING OF COURT DOCUMENTS A PROPOSED DESIGN AND COST ESTIMATE FOR 1996-1999

This proposed design creates an infrastructure of electronic documents and files. Gains in productivity from eliminating hard copy and its limitations will be greatly enhanced by overall business process improvements. A committee including judges, court staff, clerk's staff, prosecutors, defender agencies, and private practitioners has already begun discussions on how to plan and gain from such restructuring.

I. Project Coordination and Programming Staff

\$241,284

To assure orderly planning, development, plioting, and startup of project.

Project Management: Existing Court & County Staff \$0

Business Process Redesign: Existing Court/County Staff \$0

Project Design and Programming (Consultant or New Staff) \$90,000

1st Year of Contract or Position \$65,000 Specialist support as needed \$25,000

Transitional Staff Required (Parallel New Imaging Tasks). \$151,284 4.57 FTE @ \$33,131 (Salary=> \$25,116 \$8,015 <=Benefits)

(FTE level is driven by volume of documents which must be scanned as images.)

II. Electronic Filing Receipt and Management

\$320,921

Hardware and software required to receive electronic filings: includes electronic signature verification, data extraction, automated docketing to SCOMIS, routing as needed for Clerk's actions, electronic receipt/legal service, and filing of documents in the electronic court file. Also provides rapid user access to electronic filings. (Costs are estimates built from consultation with vendors and persons experienced with court technology.)

Gateway Computer System (Receipt & Security *Firewall*)		\$87,000
UNIX Computer (IBM RS-6000)	\$75,000	941
UNIX Software (with e-mail)	Included	
Gatekeeper Software (security, etc.)	\$12,000	
Internet & Modem Hookups		\$34,600
Modem Bank (multi-line)	\$15,000	
Bulletin Board (BBS) System	\$7,500	
Internet Start-Up	\$6,000	
Internet Ongoing Charges	\$6,100	per year

Document Markup/Docketing (SGML) Software

\$20,000

Software to validate incoming filings, extract data from filings, interact with SCOMIS for automated docketing, route for signature verification, route for processing and filing. Assumes use of Standard Generalized Markup Language (SGML) or similar system for data markup/extraction.

Publishing Software

\$25,000

Handles document display from SGML electronic texts, embeds images, converts ASCII into formatted documents for display, printout, etc.

Document Processing, Fast Retrieval Hard Drive System

\$50,000

System (inside "Firewall") with large (terabyte capacity magnitudes) hard drive system in which recently received documents are held while processed before final filing. During high-demand period a file is copied here for quick delivery on demand to terminals, printers, workstations (originals remain in "Data Warehouse" CD-ROM jukebox system).

SCOMIS Interface Programming

\$40,000

Develop GUI interface with SCOMIS, integrate electronic document storage indexing with SCOMIS indexing of court documents; enable automated docketing from data embedded in electronic files.

Digital Signature & Encryption Software

\$40,000

Local signature processing \$20,000
Signature key database (if local) \$20,000

Estimated state taxes at 8.2%

\$24,321

III. Court Textbase: Document Storage & Retrieval System

\$279,639

Repository of the filed electronic documents (electronic filings and images of hard copy filings), providing storage and retrieval of copies of court file documents recorded on jukeboxes of WORM (write-once, read-many) optical or CD-ROM disks.

Annual Storage Needed

Estimated percentage of documents e-filed:	40%	10 GB
Estimated percentage of documents imaged:	60%	193 - GB
Total estimated storage capacity required annually =>		204 GB

114	GB per Jukebox capacity (4 drives, 64 slots)	3	years' capacity_	
5.4	Jukebox Capacities Filled in 1st 3 Full Years; thus			See capacity
6	Jukebox Units Required over 3 Years @:	\$39,000	\$234,000	estimates in
204	Optical Disks/year (5 1/4" @ 1GB per disk) @:	\$120	\$24,447	"Storage
			a	Requirements"
Wash	ington State Sales Tax @ 8.2% on	\$258,447	\$21,193	table.

Special hardware and software required to receive or create electronic images from hard copy documents. Hard copy would be faxed to the Clerk or scanned by the Clerk to convert it into "digital" (computer readable) form for electronic storage and retrieval.

Jukel	oox & Network Image Server =		1 \$10,05	0 \$10,050	in .
	High Performance PC System	\$3,50	0		
4.2	GB Magnetic Hard Drive	\$4,75	0, ,	Hardware to di	rect handling of
	Network Linkage	\$25	0	images & to re	cord them into
	Annual Maintenance	\$1,25	0	the "jukebox" s	torage system 🐰
1	Color Monitor (SVGA)	\$30	0	(optical or CD-	ROM disks).
lmage	e Database Server=	-	1 \$10,05	0 \$10,050	
	High Performance PC System	\$3,500)		
4.2	GB Magnetic Hard Drive	\$4,750	O - = =	Hardware hold	ing database for
	Network Linkage	\$250)	images, ensuri	ng accurate
	Annual Maintenance	\$1,250		· retrieval & cont	trolling
	Color Monitor (SVGA)	\$300)	jukebox operat	ions.
-		· G		*	
lmage	e Scanners 4.9 capacity		5 units	\$35,000	
	Daily images to scan 12,33	29 80	% of all image	d documents	See capacity
	Using, e.g, Fujitsu 3090-3E @	× \$7,000) per scanner		estimates in
	2,500 images/day @ 6/min	2054.80	4.5	7 FTE to scan	- Grorage
	e e			needed .	"Requirements"
Image	Scanner Processsors 6	3.2		-	table.
	Daily Capacity (avg.) 15,4		% of imaged d	ocuments	
	High Performance PC System	\$3,500			
	Network Linkage	\$250			
	Annual Maintenance	\$950			
	Fax/Modem & Software	\$1,000)		
	21" Color Monitor	\$3,000)	·*·	₩.
Image	e Management Software ('94 ests.)			* \$272,500	
3	300-user document management		\$75,000		A**
	300-client/server software		\$20,000		
	Document Annotator/Markup Cap	ability	\$14,000		
	Index Database Software (*Gupta		\$9,000		
	Print Server Software	,	\$6,000		
			•		
	Storage (Jukebox) Interface for	6	\$ \$96.000)	
	Storage (Jukebox) Interface for Scanner Interface for	5	•		
×	Storage (Jukebox) Interface for Scanner Interface for Software Maintenance (per year)		,)	¥
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Scanner Interface for		\$12,500)	±

Providing for routine and long-term backup of electronic filing data to provide against data loss, including disaster recovery.

During initial pilot, backup and security strategies will utilize local systems in place for tape backup and copying of original electronic records. During the design of the overall EDI system, we will explore long-term daily backup methods, equipment, and software. (Parties filing electronically may also be required by rule to maintain copies of their filings until 60 days following case completion, as presently done for fax filings.) Long-term offsite mirroring of the text database will eventually need to be provided for. This may interface with existing County mainframe data mirroring (e.g., to Eastern Washington) and build on existing systems. Estimate presumes investment in substantial off-site memory resources for disaster recovery.

VI. User Workstations & Printers

\$1,951,062

Preliminary estimates of the new computer equipment or upgrades required by the Court and participating agencies (Court Administration, Clerk, Prosecutor, defenders), and to provide public access in the Courthouse. Actual agency needs must be defined to determine exact workstation requirements and costs.

		-	
Definition of "Standard" Desktop (1995):			\$4,950
Basic high performance computer	\$3,000		
Fax/Modem (14,400/28,800)	\$150	:*:	
Productivity Software (WP, etc.)	\$300		
Network Linkage	\$250		
Annual Maintenance	\$250		
17" Color Monitor	\$1,000		
32			,
Upgrades:			
Upgrade Monitor to 17"	\$1,000		
Judges' Laptop Upgrades	\$1,000		

(Laptop OR Desktop: 1 per Commissioner)

Below incl. 8.2% tax:

Court Equipment: (Judges, SCA, & Court Reporters) \$910,287

DJA Equipment: \$206,662

Public Use Equipment: (in DJA Public Area) \$116,586

	Sign 18			4.10,000
Assu	med workstations requiring monitor upgrade:		\$136,000	
50	Courtrooms	\$50,000		KCPA (Criminal) Equipment:
25	DJA Staff	\$25,000		\$175,555
35	SCA Staff	\$35,000		A 2
. 21	Prosecutors' Staff (25% of positions)	\$21,000	*	Public Defense (OPD)"
5	Office of Public Defense (OPD)	\$5,000		\$34,083
0	4 Defender Agencies (25% of positions)	\$0		
				4 Defender Agencies:
60	Judges' Laptops Required (Chambers & Offsite)		\$357,000	\$507,891

New '	Workstations Required			\$1,192,950	
30	DJA Staff		\$148,500	· ·	
30	Superior Court Staff	-	\$148,500		· ·
39	Court Reporters	1,0	\$193,050		
25	Prosecutor's Office (Criminal) (25%)		\$123,750		
5	Office of Public Defense (OPD)	,	\$24,750		
23	Each of 4 Defender Agencies (25%)		\$113,850	\$455,400	<=All 4 agencies
20	Public Viewing Workstations		. \$99,000		
					8
Printe	rs (and Maint.) for All Users @	\$1,750		\$117,250	
20	Courtrooms (1 Printer serves 3)		\$35,000	•	
10	DJA Staff (new network printers)		\$17,500		
5	SCA Staff (new network printers)		\$8,750		•
8	Reporters (1 Printer serves 5)		\$14,000		
10	Prosecutor (new network printers)	(%)	\$17,500		
1	Office of Public Defense (OPD)		\$1,750		
8	Defender (new network printers)		\$14,000	• 40	€ €
5	Public Area Printers		\$8,750		<u></u> .
	,				

Washington Sales Tax at 8.2%

\$147,862

VII. Computer Output Microfilm

\$108,200

For the "indefinite" retention of court files required by law, microfilm remains the medium recognized as archival.

This would require programming software in the electronic filing system to direct output of archived files to Computer Output Microfilm (COM) machines (2, estimated at \$50,000 each) to convert pages to microfilm images. COM hardware is not now available for this system and costs will not be known until near the end of the 3rd year of project, when microfilming of eligible archived "electronic files" would begin. (We assume that, in time, as paper files are supplanted by electronic files, the files in the Clerk's office can be held, saving conventional microfilm expenditures, to be applied to COM equipment.)

VIII. Reserved for Access to Justice Component

\$Unknown

Provision of community kiosks for remote access to Courthouse services and information, "smart" electronic forms and documents, telephonic/BBS/Internet access to information on court procedures, and other elements enhancing community access to justice and the Court.

TOTAL DJA COSTS, TO BE REQUESTED FROM THE GENERAL FUND, FOR YEARS 1 THROUGH 3 \$2,087,788

Total pages (3 yrs.):

19,828,354

\$0.105 DJA cost per page

Total pages (10 yrs.):

72,227,474

\$0.052

1996

\$1,646,831

1997

\$297,018

1998

\$143,938

QUESTIONS?

If you have questions or need further information about this proposal, contact the Project Manager:

Roger Winters, Records and Research Manager King County Department of Judicial Administration 516 Third Avenue, Room E-609, MS-6C Seattle, WA 98104 (206) 296-7838 (Office & Voice Mail) (206) 296-0906 (Fax) rwinters@seanet.com (Internet e-mail)

DJA:RLW:pc

06/23/95

STORAGE REQUIREMENTS:

		12								
Total Storage Required Per Year (GB)	Storage Required for E-filings (GB)	Storage Required for Images (GB)	Bytes Per E-filed Page	Bytes Per Imaged Page	Pages Per Year	Work Days Per Year	Pages Per Day	Pages Per Document	Documents Per Day	IMAGES vs. ELECTRONIC FILINGS
\ \	26	322	4,000	50,000	6,446,935	251	25,685	4.67	5,500	FILINGS
293	· ω	290	10%	Percentage of Electronic Filings				standard estimate	actual 1995	·*
263	Сī	258	20%	Electronic F				ale		
233	8	226	30%	ilings						
204	10	193	40%							
174	13	161	50%							
144	15	129	60%							
115	.18	97	70%							
85	21	2	80%							

90% 32 23

100% 0 26 26 06/23/95

Expenditures Estimate

OVERALL COST PER PAGE	DJA COST PER PAGE	@ 2.5% annual growth	PAGES	Cumulative Spending	TOTAL ANNUAL EXPENDITURE	Defender Agency Equipment	Office of Public Defense	Prosecutor (Criminal) Equipment	Superior Court Equipment	יין אר פאט באר באטוויסטרט		 Maintenance 	Computer > Microfilm	* Maintenance	DJA User Workstations	Data Backup/Recovery	* Maintenance	Irnage Hdwr./Soltw. (TOT)	. Maintenance	Maintenance	Data Warehouse (199-101)	* Maintenance	Dala Warehouse ('96-'99)	Signature & Encr.	Maintenance	SCOMIS Programs	* Maintenance	Processing HD System	Maintenance	Publishing Software	SGML SOftware	Internet Annual (+5%/yr)	Internet & Modern Startup	· Maintenance	Galeway/Firewall	Transitional FTEs (Scanners)	Special Programmer	lech Leader (+2,5%/yr.)	Program Year=>	Assumed Maint. %	06/23/95	7
\$0.508	\$0,255		6.446.935	\$3,274,646	\$3,274,646	\$507,891	\$34,083	\$175,555	\$910,287	.00	21 646 931				\$323,248	\$75,000		\$420,357					\$279,639	007,CPC	SAT SBO	\$40,000		\$54,100	,	\$27,050	321,040	80.50	\$21,000		\$94,134	\$151,284	\$25,000	\$65,000	1996	5.00%	IHN-	1
\$0.540	\$0,045		6,608,108	\$3,571,664	\$297,018	cupgrades, etc., in subsequent years	<additional image-ready="" td="" workstations,<=""><td>costs of ongoing maintenance</td><td><these assumed="" cover<="" departments="" td="" to=""><td></td><td>\$207.018</td><td></td><td></td><td>\$16,162</td><td>1</td><td>\$3 750</td><td>\$21,018</td><td></td><td></td><td></td><td></td><td>\$13,982</td><td></td><td>\$2,164</td><td>32,000</td><td>3</td><td>\$2,705</td><td>28</td><td>\$1,353</td><td></td><td>\$1 082</td><td>30,403</td><td>\$6 AOS</td><td>\$4,707</td><td></td><td>\$155,066</td><td></td><td>\$66,625</td><td>1997</td><td></td><td>LAH</td><td>i ,</td></these></td></additional>	costs of ongoing maintenance	<these assumed="" cover<="" departments="" td="" to=""><td></td><td>\$207.018</td><td></td><td></td><td>\$16,162</td><td>1</td><td>\$3 750</td><td>\$21,018</td><td></td><td></td><td></td><td></td><td>\$13,982</td><td></td><td>\$2,164</td><td>32,000</td><td>3</td><td>\$2,705</td><td>28</td><td>\$1,353</td><td></td><td>\$1 082</td><td>30,403</td><td>\$6 AOS</td><td>\$4,707</td><td></td><td>\$155,066</td><td></td><td>\$66,625</td><td>1997</td><td></td><td>LAH</td><td>i ,</td></these>		\$207.018			\$16,162	1	\$3 750	\$21,018					\$13,982		\$2,164	32,000	3	\$2,705	28	\$1,353		\$1 082	30,403	\$6 AOS	\$4,707		\$155,066		\$66,625	1997		LAH	i ,
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\$0.074	\$0.052	(•	72,227,474		\$5,352,776						\$3.724.961	10-YEAH TOTALS								2.						*		2.											=			

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TEN-YEAR ELECTRONIC FILING PLAN Savings/Revenue Estimates

b) Technology Filling Fee Surcharge: Technology Assessment (Local): \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10	### Revenue from Proposed Service Charges ###################################	c) Estimated Savings in Labor Required Juet to Handle Hard Copy: Hard Copy Labor (1/2 of Files FTEs): 12.50 10.45 8.41 6.36 4.32 2.27 0.23 Cost of Labor/FTE: \$414,138 \$346,358 \$278,579 \$210,799 \$143,020 \$75,241 \$7,461 Potential Labor Savings: \$0 \$67,779 \$135,559 \$203,338 \$271,118 \$338,897 \$406,676 \$414 Savings from End of Hard Copy: \$0 \$98,466 \$196,933\ \$295,399 \$393,866 \$492,332 \$590,798 \$841	a) Microfilming costs to be saved: \$0 \$270,000 \$270,	Program Year=> 1996 1997 1998 1999 2000 2001 2002 200
÷		2. \$75,2 \$338,8 \$492,3	\$0 \$270,000 \$0,0500 7,294,115 7,294,115 0 (5,400,000) 5,994,435 1,363 \$34,065 \$153,435	
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\$3,000,000	\$735,364	\$2,665,780 \$4,652,985	\$780,278 \$1,206,927	*

1996 Electronic Filing 1996-2005 Cumulative Costs v. Cumulative Savings 1997 Cumulative Costs 1998 1999 2000 -- Cum. Saved/Revenues 2001 2002 2003 2004 2005 Ō,

(Millions)

\$4-

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9

\$8-